

***Council for Agricultural Science &
Technology and the U.S.
Environmental Protection Agency***

Train the Trainer Pilot Project

Final Report

***Attached please find the documents that comprise
the final workgroup report for the Train the Trainer
Pilot Project implemented in Florida, New Jersey,
and Washington state in May 2004***

Certification & Worker Protection Branch

Office of Pesticide Programs

U.S. Environmental Protection Agency

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NATIONAL ASSESSMENT OF THE WORKER PROTECTION PROGRAM

WORKER PROTECTION STANDARD (WPS)

TRAIN-THE-TRAINER PILOT PROJECT

WORKGROUP OUTLINE & MISSION STATEMENT

Goal

The goal of the pilot was to develop a WPS train-the-trainer model that ensures consistency and quality WPS training and is nationally adaptable. Pilot host states selected were Florida, New Jersey, and Washington.

Objective

The objective of the pilot was to design, test and evaluate a train-the-trainer model that ensures trainers obtain the basic training skills, tools, and knowledge they need to impart quality WPS training to workers and that is usable by all potential trainers.

Desired Outcomes

- Standardize the training provided to trainers and encourage reciprocity among states, territories and tribes by developing an approach to ensure consistent baseline quality to be expected for imparting WPS information to agricultural workers.
- Improve the competency of WPS trainers thereby improving the quality and effectiveness of WPS training.
- Increase the number/percentage of agricultural workers receiving quality training.
- Reduce the incidents of illness/injury to workers as a result of pesticide exposure.
- Create a pool of competent WPS trainers and promote their use.

Descriptive Narrative

The pilot was established under current worker WPS regulations/requirements and was conducted in the states of Florida, New Jersey, and Washington. The pilot tested a variety of training methods and had a product that will be used by EPA in future regulatory changes. The pilot evaluated the effectiveness of training by targeting specific components to be measured by workers, trainers, master trainers and observers.

The pilot did not presuppose a national verification system of trainers or establish a mechanism for licensing/certifying. It does not require that an employer use a trainer who has gone through the pilot project nor does it test or change the content of training as currently required by WPS regulations.

Agency and Pilot Host Statements

Project Note from EPA

The Certification & Worker Protection Branch in EPA's Office of Pesticide Programs began its National Assessment of the Worker Protection Program in June 2000. Hundreds of people participated in the National Assessment of the Worker Protection Program Workshops, a series of public meetings incorporating numerous breakout sessions that were held in Texas, California, and Florida, with a final session held in Arlington, Virginia in March 2003. These workshops were organized by EPA and other program partners because of a sustained commitment to gaining valuable regional and stakeholder perspectives on the implementation of the Worker Protection Standard (WPS).

EPA committed to active follow-up on suggestions received at these workshops and established three workgroups to address 1) General Training Issues, 2) Hazard Communication, as well as to 3) design and implement a Train the Trainer (TTT) Pilot project. The assessment process and subsequent workgroups are testimony to EPA's continued commitment to work constructively with diverse interests. It is important to emphasize that the assessment workshops were open to the public and that meeting participants who expressed interest in working with EPA (e.g. volunteers) were recruited as workgroup members to further participate in the process.

EPA placed substantial emphasis on creating workgroups with balanced stakeholder representation. The Train the Trainer Workgroup involved representatives from grower groups, farmworker organizations, cooperative extension and academia, training organizations, and state and federal government. It has been our experience that having diverse stakeholder involvement cultivates active exchange, interaction, and learning, as well as traditionally yielding a better product. Those involved in developing, implementing, and evaluating the Train the Trainer Pilot worked diligently for more than eighteen months to develop and implement the pilot during May 2003. The workgroup formally concluded its activities in April 2004.

EPA remains appreciative of the effort put forth by all those involved in the Train the Trainer Project and thanks them for their time, expertise, energy, and enthusiasm.

- Mike Walsh, Workgroup Co-Chair EPA, Office of Pesticide Programs

- Jerry Oglesby, Workgroup Co-Chair, EPA Region 6

Project Notes from Pilot Host States

Florida, May 13-14, 2003

The Florida Department of Agriculture & Consumer Services was pleased to be selected as a host for the Train the Trainer Pilot. Laura Powell of Palm Beach County Extension and Ofelio Borges of the Washington State Department of Agriculture conducted the English class while the Spanish session was hosted by Cesar Asuaje of the University of Florida Extension Service and Alfredo Bahena of the Farmworker Association of Florida. Their teaching styles were relaxed and they all seemed comfortable in their roles as trainers.

Although the trainers were required to conduct training in cooperation with a co-trainer with whom they had little previous familiarity, they are to be commended for carrying out their training sessions in a relaxed and professional manner. While there are always some distractions during such sessions, the attendees remained receptive to the tone set by the trainers. There was much interaction among attendees, most of which was positive, and the Master Trainers offered a firm understanding of the state regulations and answered questions objectively and professionally. The question and answer session about teaching issues seemed to be particularly beneficial as did the hands-on demonstrations used to foster skill development. Overall, I was pleased with the level of participation and cooperation of the trainees and the professionalism of the instructors. My thanks to all the members of the Train the Trainer Pilot Workgroup for their commitment to implementing this project.

– Eric Sespico, Florida Department of Agriculture & Consumer Services

New Jersey, May 21-22, 2003

The New Jersey Department of Environmental Protection volunteered to be a pilot state for the Train the Trainer Curriculum shortly after the Train the Trainer Pilot Workgroup was established. We are pleased to have had the opportunity to participate in such an interesting project and learned a great deal from the experience.

Our trainer training was held in Rosenhayn, New Jersey where Jose Manuel Guzman of C.A.T.A. and Luis Urias of the Idaho Department of Agriculture were the Master Trainers for the Spanish class and Mario Saavedra of the Texas Department of Agriculture worked with Richard Mandelbaum of C.A.T.A. as instructors in the English class. While most people recognize that there is always room for improvement, I was generally pleased with the way the both of training sessions were

conducted. The trainee participants seemed eager to learn and the trainers seemed up to the challenge. My sincere thanks to each of the Master Trainers for their role in implementing this pilot in New Jersey. While working for more than a year as a workgroup to develop and implement this pilot was a serious challenge, we should all remember that we were the only self-directed workgroup coming out of the National Assessment of the Worker Protection Program. Congratulations to all.

- Nancy Santiago, New Jersey Department of Environmental Protection

Washington State, May 28-29, 2004

The Washington State University Extension Service was the last to implement the Train the Trainer Pilot. As I finalized the plans for the pilot, I appreciated the willingness of the other pilot states to share their “lessons learned” in debrief calls. Learning from their experiences better positioned us for the many challenges of implementation.

Washington’s Master Trainers for the English language training were Tim Stock of the University of California at Davis and Pedro Serrano of the Washington Department of Labor & Industries. Master Trainers for the Spanish language class were Ofelio Borges of the Washington State Department of Agriculture and Luis Urias of the Idaho Department of Agriculture. The training facility was functional for informal training, however, the Master Trainers and participants took their roles seriously and focused on information exchange and improving methods for imparting pesticide safety information. The participants were diverse in their experience, perspectives, and personal training philosophies. As with many training sessions, there is real value learning from our peers. Many thanks to the workgroup members and our Master Trainers.

- Karen Lewis, Washington State University Cooperative Extension Service

Evaluation of the Worker Protection Standard Train-the-Trainer Model Curriculum



Report and Evaluation prepared by Patricia Boiko, MD, MPH, director of Research-Outreach Pacific Northwest Agricultural Safety and Health Center at the University of Washington and Gerald van Belle, PhD, Professor, Departments of Biostatistics and Environmental Health.

<http://depts.washington.edu/pnash/home.htm>

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http://www.cast-science.org/cast/src/cast_top.htm

<http://www.epa.gov/pesticides/health/worker.htm>

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Evaluation of the Worker Protection Standard Train-the-Trainer Model Curriculum

Executive Summary

This Executive Summary is designed to highlight only some of the noteworthy elements addressed in the body of the Pacific Northwest Agricultural Safety & Health Center (PNASH) report and analysis of the TTT pilot implementation. For complete information please read this entire document.

While this report and evaluation were developed by the PNASH at the University of Washington, it is important to mention that the pilot project evaluated by PNASH was part of the U.S.

Environmental Protection Agency's (EPA) National Assessment of the Worker Protection Program. The national assessment itself involved large public workshops in Texas, California, and Florida between 2000-2003. Reports from these workshops can be seen at www.epa.gov/oppead1/safety/workshops.htm. From these meetings, both EPA and the Council for Agricultural Science & Technology (CAST), a cooperative agreement partner, committed to active follow-up on suggestions received during the meetings and established three workgroups to address General Training Issues, 2) to address Hazard Communication, and 3) to design and implement a Train-the-Trainer (TTT) Pilot project. This document focuses solely on analysis related to the implementation of the TTT Pilot Project in the pilot states of Washington, Florida, and New Jersey. Farmworker, grower, state lead agency, county extension service, and other interested parties worked closely in a workgroup format with CAST and EPA for more than eighteen months to design and implement this project.

The objective of the pilot evaluation was to determine if the train-the-trainer model curriculum ensures all potential trainers obtain the basic training skills, tools, and knowledge they need to impart quality WPS training to workers.

The goal of the pilot evaluation was to determine if the Worker Protection Standard (WPS) train-the-trainer model curriculum ensures consistency and quality WPS training in the pilot states of Washington, Florida and New Jersey, and if it is feasible as a national model. PNASH has

determined that the pilot was successful and met its goals and objectives. Specifically, the goal of the WPS train-the-trainer model curriculum ensuring consistency and quality WPS training in Washington, Florida and New Jersey, was achieved. Additionally, PNASH has concluded that this TTT pilot curriculum is feasible as a national model with diverse state regulations, crops, trainers and workers.

The University of Washington Human Subject Division, EPA, and the Council for Agricultural Science & Technology (CAST) determined that neither this pilot project nor the associated PNASH evaluation fall under current Human Testing Guidelines. The Train-the-Trainer Workgroup, a part of the National Assessment of the Worker Protection Program, was only evaluating and assessing the effectiveness of pesticide safety training methods.

Master Trainers, those who later trained workers, attended an orientation prior to training Trainers. The Orientation was conducted by Patrick (Pat) O'Connor-Marer and Jennifer Weber of the University of California at Davis and was later revised by workgroup members during the review process. In an evaluation of the scope, content, and preparation of the Master Trainer Orientation & Training, the attendees thought the goals and scope were generally well covered.

More than 100 workers from Florida, New Jersey, Washington and Puerto Rico completed evaluations before and after their training. Seventy seven percent of the evaluations were completed in Spanish with the other 23% being done in English.

Workers objectively demonstrated improved knowledge and perceived they gained new knowledge. Most said they knew more about pesticide health and safety after receiving the training. The vast majority felt that the training information was important and they would use the information they learned. The model curriculum ensures potential trainers obtain the basic training skills, tools, and knowledge they need to impart quality WPS training to workers.

Evaluation of the Worker Protection Standard Train-the-Trainer Model Curriculum

The Goal

The goal of the pilot evaluation was to determine if the Worker Protection Standard (WPS) train-the-trainer model curriculum ensures consistency and quality WPS training in Washington, Florida and New Jersey, and if it is feasible as a national model.

The Objective

The objective of the pilot evaluation was to evaluate if the train-the-trainer model curriculum ensures all potential trainers obtain the basic training skills, tools, and knowledge they need to impart quality WPS training to workers.

Master Trainers

Methods

Master Trainers attended an orientation prior to training Trainers. The Orientation was designed by Pat O'Connor-Marer and Jennifer Weber and revised by reviewers. The revised version was presented to a WPS subcommittee during the WPS assessment meeting in Arlington weeks before the master training orientation. The designed, revised, Master Trainer Orientation was presented in a room set up the way it would be at the Master Training Orientation. Pat and Jennifer went over each point of the training and observed that there were some areas that needed work. The following day they met with workgroup members Jackie DeCarlo, Teresa Nieda, and Alice Larson and revised the orientation. A final review then occurred with all the subcommittee members later that day. Appendix 1 and 2 include the goals of the orientation and the schedule.

Three Master Trainer evaluation tools and Guidelines for observer evaluations (Appendix 3) were developed by the Pacific Northwest Agricultural Safety and Health Center at the University of Washington and the WPS Train-the-Trainer Evaluation Workgroup and the National Train-the-Trainer Pilot Subgroup consisting of grower, worker, consultants and EPA agency representation. Tools were completed by master trainers on the evening before the master trainers were oriented, just after completing the orientation and then following their training of trainers. (Appendix 4,5,6) A Master Trainer Orienter commented on the orientation process after it occurred. Observers observed the trainings of Trainers and completed full reports. To become familiar with the context and process of the trainings, Patricia Boiko observed the Washington State Train the Trainer Session scheduled for May 28th and 29th and a worker training in Washington State. In addition, some of the evaluation tool questions for the trainers were independently evaluated by

Sonja Brodt and Gale Perez¹ during a Train the Trainers workshop conducted in California in June 2003. This California workshop is unrelated to this project and is used here solely for comparative purposes. The responses to the evaluation tool answers were entered into an Excel spreadsheet and assessed as below.

Trainers

Evaluation Assessment

Evaluations from Washington, Florida and New Jersey pilots were assessed for the ability of the program to impart key knowledge to participants, the format of the program and suggestions for improvement. Master Trainers evaluated the program with a pre-evaluation tool given prior to their Orientation, a post-evaluation tool given after their Orientation and finally a tool following their training of the Trainers. The trainer evaluation included questions from a pre and post training of Trainers by the Master Trainers (Appendix 7,8), a trainer evaluation following worker training, worker evaluations and the observer evaluations.

Assessment of the evaluation tool questions was done by various methods including t-tests, chi square, regression, and analysis of variance. Following a worker training by trainers, trainers did a post worker written evaluation. Workers did a pre and post evaluation using a tape recorder and answer sheet where they circled the responses, “yes, no and I’m not sure.” (Appendix 9,10) (See audio tape included with this report.)

Human Subjects: Both per conversation with the University of Washington Human Subjects Division and EPA/CAST confirmation with the Project Officer this pilot evaluation does not fall under Human Testing Guidelines as the Train-the-Trainer Workgroup, a part of the National Assessment of the Worker Protection Program, is only evaluating and assessing the effectiveness of pesticide safety training methods.

Master Trainer Sites

Orientation: Washington, DC

Master trainers: 10 with 2 trainers doing trainings in 2 pilot States.

Master Trainer Orienters: Patrick O’Connor- Marer and Jennifer Weber

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Outcomes

1. The ability of the program to impart key knowledge to participants
2. The format of the program
3. Suggestions for improvement

Orientation Evaluation

The Master Trainer Orientation evaluation by the orienter indicated that the program was delivered as designed. The training followed the agenda very closely both in time and material covered. The presentations made by Jennifer Weber were conducted in Spanish; Pat O'Connor-Marer conducted his in English.

Master Trainer Characteristics

Demographics

Master trainers were ages 32 to 48 with a mean age of 41. There were 9 men and one woman. Their education varied from completing a 9th grade education to obtaining a Master's degree. There were 2 Spanish and 2 English speakers, 3 were bilingual and no predominant language was listed for 3. They were mostly experienced and felt competent prior to the training as WPS trainers.

Teaching Experience

Prior to the training all master trainers had experience teaching other trainers and using manuals and educational materials to better educate individuals. A manual specifically named by two of the trainers was the *Master Trainer Manual* developed by the *Farm Worker Health & Safety Institute*. All reported experience teaching WPS but there was a variation between 6 and 2000 total participants taught. All had experience using flip charts and other methods. Their previous training sessions lasted between 3 hours and 3 days.

Orientation Evaluation

Scope, Content, Preparation

All Master Trainers thought the goals and scope were covered well. Additional goals, scope and topics were suggested (Table 1). Even though all were experienced, they all either agreed (score= 4) or strongly agreed (score= 5) that they were now better prepared because of the training (average score = 4.6). They felt they understood the Worker Protection Standard (WPS), were able to share their experiences with other trainers, and got good ideas from the other trainers. There was a generally positive (average score= 4.0) but variable response (range 2 (disagree)-5 (strongly agree)) to learning to use the manual. Two people needed more time to review the

manual and one suggested that, “would have been better to spend a little more time on this & have each chapter title page put on a flip chart paper & taped on the wall.”

There was generally enough time for the topics (4.0) but some thought more time needed to be spent on the 11 points. They also wanted more time with state people to prepare state-specific training. The Master Trainer orientation was thought to be relevant to training WPS trainers. There was a variable response (disagree to strongly agree (2-5), average 3.3) as to whether the orientation introduced new or unfamiliar information or techniques. However, they felt they would use what they learned and understood what was expected of them when they trained trainers as part of the Pilot Program. The content and format of the WPS manual was well received.

Master Training Logistics

The location was thought to be comfortable and conducive to learning except for the lack of windows. The manual and handouts were thought to be logically organized.

Post Trainer Training Orientation Preparation

Following the Trainer-Training, Master Trainers felt that the Orientation adequately prepared them to train trainers for the WPS Pilot Program. However they had suggestions of spending more time on sections of the manual and preparing for state trainings including logistics and evaluations.

The Master Trainers had variable responses to whether or not they could have taught the Trainers just as effectively without attending the Master Trainer Orientation. Half of them felt that they could not have taught as effectively without the training and the other half felt they could have taught effectively because they were experienced already. Feeling like they could have been just as effective without training was not associated with age, education or experience training. The question was phrased, “Without attending the Master Trainer Orientation, I could not have taught trainers as effectively”. This double negative question may have been confusing.

Methods taught at the Master Trainer Orientation were thought to be very successful during their Train-the-Trainer Session but they were not thought to be successful in preparing them to actually conduct the Pilot Train-the-Trainer Program. Half of the Master Trainers suggested changes to the orientation based on their training. (Table 1) After the training they all felt a high level of competency.

Observer Evaluation

Observers noted that the Master Trainers (MT) performed better when the material was familiar. The Master Trainers varied in their familiarity with the order and content of the lesson plans

which affected their flow, energy and leadership/confidence of their training. The English language session observer noted a misunderstanding of how to use the “Training Issues” section on “Day One” in all three states. In the Spanish language session some of the states left out reiterations of training points and training time budgeting tips. On the other hand, this observer noted that increased comprehensiveness and training quality occurred in Washington and New Jersey when the MT’s combined the *How to Conduct Training for Field Workers* and *The WPS* sections.

Evaluators commented:

“In all three states the end of the day wrap up sections were brief as there were many logistical items to address; reimbursement, assessments, class photos etc. Trainers and MT’s were anxious to call it a day. All lingering questions and points of clarification were addressed. All states added discussions on the use of the black light, Power Point and overheads as tools.”

“Training agenda/curriculum should have stressed that MT’s provide additional props for role-playing, case studies and interactive training in general. In Florida they had a few props and some trainers brought their own for day 2. In New Jersey, (name deleted for report) provided a “Central Notification Board” (wins my prize for best “addition”). New Jersey trainers had soda bottles, spray equipment and large plastic bugs. In Washington, trainers had ready access to PPE, spray equipment and crop sheets.”

Trainer Evaluation

Sites

Trainings: Washington, Florida, and New Jersey

Trainers: 84 completed evaluations

Master Trainers: 10

Observer Evaluation

Two trained observers recorded specific comments and impressions of the Trainer Trainings in all three States. One observer evaluated all three state training in English and one evaluated all the Spanish language sessions. They submitted reports regarding each state and their impressions of the overall training. Both agreed that the pilot was successful and met its overall goals. They noted that the three state sessions differed in trainer group size, composition and Master Trainers. Comments specific to the trainings are included under the trainer subsections below.

Trainer Demographics

(Table 2)

Eighty-four Trainers completed an evaluation. Trainers were between the ages of 20 and 79 (mean 43), 73% male, 34% Spanish speaking, and 55% English speaking. Their education was variable with the majority with some college to graduate school but 11% grade school or less and 21% completing High School.

Florida had significantly more male trainers than Washington or New Jersey. New Jersey's trainers had significantly more education beyond high school than Florida or Washington State. There was no difference in language or age between the states. Their training experience was widely variable. They trained between no workers and thousands of workers. Most had trained less than 10 workers.

An observer noted that each group was “comprised of industry, advocates and regulators... interested in being collaborative and in sharing perspectives and training approaches... There was diversity in personalities, styles, geographic regions, and levels of competence.” A trainer commented about the diverse group, “I didn’t like how there was many disciplines in the room. Me and the other farmers wanted to discuss how we were practically going to use the information.”

Post Training Trainer Evaluation

Ability of the program to impart key knowledge to participants

The vast majority of participants scored significantly higher on the post evaluation than on the pre evaluation. (Table 3) The subjects with more or higher education knew more at the beginning and learned less. Sex differences in scores pre and post test were due to education. Once education was adjusted for there is no difference in scores between men and women. The amount learned was not significantly different between the English speakers and the Spanish speakers. There was no evidence that number of workers the trainers had previously trained influenced pre, post, and change scores.

Specific evaluation questions were not worded well or were inaccurate. (Table 3) The question, “High levels of exposure to pesticides can result in blurred vision, heavy sweating, vomiting, and blistered skin” was not used in the California survey. Pat O’Connor-Marer thought that it was inaccurate because, “does not differentiate between types of pesticides. Also, the symptoms listed

would not all be seen as a result from exposure to one pesticide (Roundup or sulfur, for example, would not cause blurred vision, heavy sweating, or vomiting - these are symptoms of organophosphate or N-methyl carbamate pesticides. Blistered skin would not be a symptom of OP or carbamate exposure.)” However, in the Washington, New Jersey, and Florida evaluation, there was no demonstrated misunderstanding of the question.

Evaluation of the MT

(Tables 4 and 5)

In general, the trainers found that the Master Trainer instructors created an environment that promoted constructive and interactive discussions. The information was conveyed in an understandable manner by the Master Trainer. There were comments about the outstanding nature of three of the instructors. On the other hand, one instructor had comments about lack of preparation.

The format of the program

According to observers, Florida had significant delays both mornings which had to be made up throughout the session. The time needed for the pre and post assessment was not factored in the Florida or New Jersey schedule. Washington had the advantage of knowing this information and was able to move the start time up by 30 minutes to accommodate this. The schedule was tightest in Florida because of delayed starts and in Washington because of class size.

The trainers found the locations to be comfortable and conducive to learning, the materials were organized, relevant, and new. Although most trainers in all three states rated the facilities highly, the Washington facility included poor ratings whereas New Jersey and Florida only received high ratings. This led to a significant difference in ratings of the facilities. The observer report concurred with this finding noting that although, sites accommodated the needs of MT's and trainers and were conducive to learning, the facilities in Florida and New Jersey were superior to those in Washington allowing better use of audiovisual equipment

Materials

(Table 4 and 5) The trainers reported that the materials were organized, relevant, and new. There were comments about the “realness” of the videotape. Observers heard comments that the: *“flip chart is too small, manual content looks complete but out of order or translation is not good, video should be mono-lingual. All appreciated that they were given the tools. Trainers seemed very excited about the use of the black light and powder and the potential of using Power Point.”*

Post Worker Training

All trainers strongly agreed that their training had adequately prepared them to teach the WPS

curriculum (5/5). However, half thought they could have taught the curriculum as effectively without attending the Train-the-trainer program.

Worker Evaluation

Sites

Worker Trainings: Washington, Florida, New Jersey, and Puerto Rico (Note: One trainer attending the New Jersey trainer session hosted a worker training session in Puerto Rico. Since the purpose of this pilot is to evaluate methods learned by trainers in New Jersey, both CAST and EPA approved the training to take place in Puerto Rico.)

Workers: 106 completed full evaluations, 96 matched pre and post evaluations.

Trainers: 5 trainers completed the post-worker evaluation from Washington, New Jersey and Puerto Rico

Worker Demographics

To maintain complete anonymity, no identifying demographics of the workers were collected. In addition, no records were kept of which trainers did worker evaluations. Of the 106 workers who completed the evaluations, 15% were from Florida, 53% from New Jersey, 27% from Washington and 11% from Puerto Rico. Workers completed 77% evaluations in Spanish and 23% in English. Puerto Rico and Washington State had predominantly Spanish speakers. In New Jersey 74% completed the evaluation in Spanish whereas in Florida 70% completed the evaluation in English.

Ability of the program to impart key knowledge to participants

There was a significant improvement between the pre and post evaluation for the knowledge questions for the workers. (Table 6) Ninety-two percent thought they gained new knowledge. Specifically, workers learned most about symptoms of pesticide poisoning, acute and chronic exposures, drift exposure prevention, pesticide residue and that the boss cannot fire them for refusing to go into a field while it is being sprayed with pesticides. However, although 58% felt like they knew what was expected of them to stay aware of pesticide risks, 40% each did not know or weren't sure.

The pre-evaluation score varied by state with Florida having the lowest score and New Jersey the highest. However, the post-scores were similar indicating that the workers learned enough to equalize their post-evaluation scores. (Table 7)

Workers who had previous training did significantly better on the pre-evaluation but equalized on the post score with those that had no previous training. Both groups improved their scores but the workers who did not have training increased their scores more than those who had been trained previously.

Previous Training and Knowledge-self rating

Half of the workers reported previous pesticide health and safety training. Thirty-eight percent had seen a video for training. Forty-six percent had attended a class where someone talked to them about pesticide health and safety. Sixty-two percent reported receiving instruction from their supervisor or employer concerning which fields were recently sprayed.

Fifty-one percent thought they knew something and 23% thought they knew a lot about pesticide health and safety. Those that knew a lot scored higher on the pre-evaluation but scored about the same on the post evaluation as those that did not know a lot.

Evaluation of the Trainer

There were 5 trainer evaluations that corresponded to worker evaluations. There were trainers who sent in their worker evaluations but did not complete the trainer evaluation. There were no post-worker trainer evaluations from Florida.

The vast majority of workers thought that enough time was spent on the training. Trainers reported spending between 45 minutes to one hour on the training. The vast majority felt that the training information was important for pesticide safety and that they would use most of what they learned. Eighty-five percent thought the training covered all 11 points of the WPS.

Prior to receiving the training and again after the training, the vast majority of workers thought it was worth their time to go through this WPS pesticide safety class. Ninety percent liked the way the trainers taught compared to the way they were taught before, learned more than from past trainings and had an opportunity to have all their questions answered. Eighty percent said they know more about pesticide health and safety now that they received the training.

The format of the program

Fifty-six percent said the training location was NOT comfortable. Most of the trainers reported training in an office or in the field. There was no significant difference in comfort by state where the training occurred. Fifty-nine percent reported that the training time was NOT convenient. The trainers reported training time between 8 AM and 1:15 PM.

Observer Evaluation

One training in Washington was observed by the principle author of this report. The trainer had

been observed in the trainer-training as well as in the worker training. The training occurred in a shed, was highly interactive and utilized the flip chart. It was not a comfortable location, the workers sat on upside-down buckets in their work clothes. The observation was congruent with the worker evaluations in all states: the training site was not very comfortable or convenient but it was worthwhile. The workers were highly responsive and expressed appreciation for the training. It appeared to the principle author of this report that it was everything that the program was meant to be.

Trainer Comments

Following the worker trainer, a trainer commented, “before, I would just show a video, now I spend more time explaining, the flip chart is a nice tool.” Trainers felt that they now gave more time for questions, had better tools (specifically the flip chart) and teaching methods as well as ability to “allow workers to participate more”.

Summary

The evaluation assessment includes the tools for evaluation of the Master Trainers, Observers, Trainer and Worker training evaluation. The goal of the pilot evaluation is to determine if the Worker Protection Standard train-the-trainer model curriculum ensures consistency and quality WPS training in Washington, Florida and New Jersey, and if it is feasible as a national model. The objective of the pilot evaluation is to evaluate if the train-the-trainer model curriculum ensures all potential trainers obtain the basic training skills, tools, and knowledge they need to impart quality WPS training to workers.

To evaluate if the goals and objectives were met, the training, education and experience prior to the training of the participants was evaluated. Then, an evaluation tool determined their perception of the trainings as well as their mastery of the information using questions regarding the information delivered.

Master Trainer’s education varied from completing a 9th grade education to obtaining a Master’s degree. They were all experienced and had exposure to both teaching techniques and WPS information. They use a variety of techniques already and are experienced in most of the techniques used in the MT training. However, they all thought they benefited from the Orientation and had specific suggestions for improvement.

The Orientation was delivered as designed and met its goals. Methods taught at the Master Trainer Orientation were thought to be very successful during their Train-the-Trainer Session but when reevaluated after the actual trainer training, they were not thought to be successful in

preparing them to actually conduct the Trainer trainings. Most wanted more state specific and evaluation information. Half thought they could not do as good a job with the training if they hadn't participated in the Orientation. However, the question was poorly worded and may have been confusing.

Trainers varied in age, language, education, training experience and occupation. The vast majority of participants scored significantly higher on the post evaluation than on the pre evaluation. Previous experience training workers did not influence scores. With the exception of one Master Trainer, the trainers found that the instructors created an environment that promoted constructive and interactive discussions and conveyed information in an understandable manner. There was some discomfort of employers training with employees and regulators.

The training time needed was underestimated at first but was adjusted to accommodate the evaluation in time for the Washington trainings. The trainers found the locations to be comfortable and conducive to learning, the materials were organized, relevant, and new. New Jersey and Florida sites allowed better use of audiovisual equipment and were rated more highly than the Washington. There was generally enough time for the topics but some thought more time needed to be spent on the 11 points. Trainers who did worker trainings felt that the program prepared them to teach the WPS curriculum but half thought they could have taught it just as effectively without the training.

Over 100 workers from Florida, New Jersey, Washington and Puerto Rico completed evaluations before and after their training using an audiotape in their language of choice and circling *yes, no* or *I'm not sure* on a corresponding worksheet. To maintain complete anonymity, no identifying demographics of the workers were collected. Workers completed 77% evaluations in Spanish and 23% in English.

Workers objectively demonstrated improved knowledge as well as perceiving that they gained new knowledge. Even though knowledge before training was less in some states and for those who had not had training, the post training scores were similar. The vast majority liked the way the trainers taught compared to the way they were taught before, learned more than from past trainings and had an opportunity to have all their questions answered. Most said they know more about pesticide health and safety now that they received the training.

However, many did not know how they would stay current with 40% reporting that they did not know what was expected of them to stay aware of pesticide risks. Half of the workers reported previous pesticide health and safety training. 23% thought they knew a lot about pesticide health and safety. For over half of the workers, the training location was NOT comfortable and the training time (between 8Am and 1:15PM) was NOT convenient.

The vast majority felt that the training information was important for pesticide safety and that they would use most of what they learned. Eighty-five percent thought the training covered all 11 points of the WPS. Prior to receiving the training and again after the training, the vast majority of workers thought it was worth their time to go through this WPS pesticide safety class.

Suggestions for Improvement

Specific suggestions for improvement of the trainings are listed in Table 8

Overall Summary

This evaluation measured the success of the pilot from the implementation at the Master Trainer level all the way to the actual training in the field of workers. The pilot was successful and met its goals and objectives. Specifically, the goal of the Worker Protection Standard (WPS) train-the-trainer model curriculum ensuring consistency and quality WPS training in Washington, Florida and New Jersey, was met. Even though the states had different language, educational and training levels of the trainers and workers and thus had different pre-training levels of knowledge, they became equal in knowledge after training. It was tested in 3 geographically and state regulatory diverse climates. The training model used during this pilot is feasible as a national model with diverse regulations, crops, trainers and workers.

The model curriculum ensures potential trainers obtain the basic training skills, tools, and knowledge they need to impart quality WPS training to workers.

<http://depts.washington.edu/pnash/home.htm>

http://www.cast-science.org/cast/src/cast_top.htm

<http://www.epa.gov/pesticides/health/worker.htm>

Table 1**Master Trainer Orientation: *Additional Goals, Scope and Topics***

Additional Goals and Scope	Other Topics to Include	Changes to Orientation
Train Agricultural workers so they can train other workers in their community.	More time on the time plan and planning for the different sections of the training.	Section that teaches how to make a complaint, describe and explain the evaluation process,
Explain the process of filing a complaint.	Post evaluation after training the workers-How it can be done effectively.	Put training partners together to practice working / presenting/ training together.
History of EPA, WPS and why are we doing this for the farmworkers.	How to fill out / file complaints from farmworkers.	1 hour per couple, to train/present to other master trainers
It should be expanded to all workers	WPS regulator issues concerning workers, WPS exceptions.	
Give the best training possible to the future trainers and to give them consistent information.	More information on clinics, hospitals, ER's. PPE Required for early entry workers. More information on the difference between workers and "early entry workers"	

Table 2**Trainer Demographics**

State	Age Mean (range)	Sex	Language Spoken Most of the Time	Education
25 (31%)Florida	22-79 (mean 42)	23 M, 1 F	10 Spanish, 14 English	43% High School or below. 57% some college or more
27 (33%) New Jersey	26-59 (mean 38)	15 M, 10 F	7 Spanish, 19 English	9% High School or below. 91% some college or more
29 (36%) Washington	20-72 (mean 43)	19M, 9F	1 2 Spanish, 13 English	40% High School or below. 60% some college or more
Total	43 (20-79)	M 57 (73%) F 21 (27%)	Spanish 34% English 55% Both English and Spanish 1%	Grade School or less 11% High School 21% Some College 15% College 35% Graduate School 18%

Table 3**Trainer Evaluation Before and After Training****Summary:****Improved 56****Worse on post test 6****No change 11**

Question	Wrong both times	Right Both times	Right before, wrong after	Wrong before, right after
Providing pesticide safety training to workers is a legal requirement.	3	67	1	4
Once pesticide has been applied to a field, the workers may return immediately.	0	70	1	4
The WPS requires: notifying workers when pesticides are to be applied, establishing restricted-entry intervals, and providing protective equipment to the workers.	1	67	2	5
Employers must display safety posters that contain pesticide safety information and contact information for the nearest medical facility.	0	71	0	4
It is helpful in your training for you to know about state and local pesticide regulations.	0	68	3	4
It makes no difference how soon first-aid is given after pesticide contamination	8	53	6	8
Pesticide notification requirements can be found on the pesticide label.	3	49	9	14
Employers may not take action against any worker attempting to comply with WPS regulations.	6	56	3	10
Knowing the cycles of crops and harvest times will help you understand when the greatest number of agricultural workers are employed and require training.	5	60	2	8
A pesticide that has a label that says "Warning" is less toxic than one that says "Danger."	15*	45	3	12
Symptoms that are observed soon after exposure are known as acute onset.	0	46	1	28
Persistent symptoms are considered to be chronic effects, typically resulting from many exposures to the pesticide.	5	49	3	18
The severity of symptoms of pesticide poisoning is usually determined by the amount of pesticide entering the person's tissues.	17*	27	5	26
High levels of exposure to pesticides can result in blurred vision, heavy sweating, vomiting, and blistered skin.	1	61	2	11

A worker's risk equals the duration of exposure multiplied by the level of toxicity of a given pesticide.	12*	42	5	16
Anyone can tell the toxicity, safety gear needed, and first aid information of any given pesticide by simply looking at the label.	7	49	4	15
Ingredients added to pesticides, such as solvents and stabilizers, may be toxic to people.	4	57	2	12
FIFRA's provisions include requiring the users of restricted-use pesticides to be certified and establishing tolerances for residues that may remain on raw agricultural products.	17*	35	3	20
Pesticide residue is a powder that can be found on plants, in soil, in water and may be transferred onto clothing.	5	50	1	19
WPS covers workers who are employed in the production of agricultural plants on farms, in forests, and in commercial nurseries and greenhouses.	1	61	0	13
All WPS-covered pesticides have a restricted-entry interval (REI).	7	44	5	19
Employers must provide decontamination supplies that must be located within one-quarter mile of the work location.	0	62	0	13
Employers do not have to provide transportation for any injured worker to the nearest medical facility.	2	59	3	11
Children, pregnant women, and the elderly, do not face a higher risk if exposed to pesticides.	2	62	8	3

- Fewer than 67 subjects got it correct afterwards. There was substantial improvement but it can be better. Either the question has to be reworded or more emphasis should be given in the course on the material covered by these questions.

Table 4**Training Location, Materials and Master Trainers**

Question			*Minimum	*Maximum	Mean	SD
The training location was comfortable and conducive to learning.			1	5	4.41	.819
The training material was logically organized.			2	5	4.34	.644
The material covered in the training was relevant to training agricultural workers.			2	5	4.58	.595
The training material contained new or unfamiliar information.			1	5	3.93	.869
The instructor created an environment that promoted constructive and interactive discussions.			2	5	4.53	.599
The information was conveyed in an understandable manner by the trainer.			2	5	4.51	.623
Strongly disagree	Disagree	No opinion	Agree		Strongly agree	
1	2	3	4		5	

Table 5A

Comments Regarding Master Trainers by Trainers

What instructor did well

- Give us guidance to how to use different methods of training.
- Very clear and used methods that kept me interested.
- Spoke in clear and brief manner (uncomplicated).
- Facilitate the learning process.
- Provide tools to conduct the training.
- Exchanged items and comments from group.
- Well organized, excellent preparation, conducted and spoke in excellent manner.
- Presented the topics well. Also created a good learning environment.
- Involved the students.
- Answered all questions, made learning fun.
- Using a language that was understandable for trainer.
- Interact with audience.
- Both instructors were well versed in all phases.
- Provided me with all the materials needed.
- Organization, explanation of techniques.
- Explained. Very conscious of the time, provided positive feedback.
- Curriculum was excellent.
- Explain the 11 rules of WPS. Kept my interest all day, was not a strain to be here.
- Both instructors know the material well and were able to communicate the information effectively.
- (name omitted from report) was outstanding.
- Good maintenance time, agenda-encouraging of participation
- Guided conversation, provided information and related to everyone.
- Explained the WPS for farm workers in better detail.
- The instructor was enthusiastic and creative.
- Kept information flowing, lively discussion.
- Made me think about situations that may arise in a work environment.
- Presented the entire training in a balanced manner.
- Introduction (Ice breaker). Trainers were very confident in front of group. For me, the instructors did very well.

Table 5B

Comments Regarding Master Trainers by Trainers

How instructor could improve

- Make part of training to show workers examples of chemicals/pesticide and their purpose.
- (name omitted from report) presentations indicated that he was not prepared for the level of this group.
- You should improve to overheads label information section was the weakest. I recommend you start by listing the minimum coverage about labels for the instructors and work on one of those items.
- Make forms standard. So everyone uses the same thing.
- Practice doing an entire training-in order to be able to get the idea of the time involved and the balance of interactive and faster presentations.
- Actual onsite visit to a farm location pre-arranged (possibility providing Recertification. Credits) with an actual training session hands-on.
- PowerPoint is easier than slides or overheads.
- Needs to address the difficulties in enforcing pesticide laws. Recognize the reality of the situation of farmworkers and the abuses with a WPS.
- What you “train” should do before, during, and after workshops. And history of pesticide to the agenda. Equipment availability to perform assignments (ie.-videos_.
- Do not schedule 2 classes at the same time unless facility is fully equipped.
- Increase/intensify the part about the benefits of pesticide use and that they are not dangerous when used correctly.
- Study the manual more. Needs to be written with language used in community or understood by workers.
- Use videos that are more realistic. Would be better with more equipment.
- Train bosses and ranchers so they understand what is involved in a training.
- Compliment the information with case studies and real labels.
- Practice doing an entire training-in order to be able to get the idea of the time involved and the balance of interactive and faster presentations.
- More information federal law because it is very important. Also, include information on state law.
- Needs more on training techniques and most important to use them when teaching laws to new workers.
- Should use mono-lingual (Spanish) videos.
- Provide “video clips” of situations that could be used by trainers. More case studies.
- Have more breaks

- The trainer needs to be more organized and show more interest in subject. He seemed bored or tired.
- You should improve overheads; label information section was the weakest.
- Prepares participants for training and knowledge of regulations.
- Use more common terms when describing technical processes or terms. atmosphere, interactive methods (calling on people, different leaders)
- More time. Include more growers. More training courses.
- Need to use less technical language and more common terms for questions, etc. Speak and teach using language understood in community.
- Spend more time and make more extensive on training methods and how to use materials. Improve the overhead's.
- Stress that there are different laws in each state-many stricter than Federal Law.
- MT1 added humor and more interaction than MT2. MT2 needed more "zip" in his training.
- There were many times when very simple concepts were focused on too long (dragged) but then other times where complex items audience need to know about were not explained
- Start on time 8:30? - More sure of self.well.
- More focus on state regulations.
- I didn't like how there was many disciplines in the room. Me and the other farmers wanted to discuss how we were practically going to use the information.
- I would have preferred more details on WPS people requirements. L&I needs to explain WA distinctions in the trainings and in the materials. In addition to items mentioned in the class, explain that burning of containers is illegal. Many labels say its legal unless prohibited locally or in "the state". Employees will not know above local state air act prohibition.

Table 6**Worker Evaluation Before and After Training****Summary:****Improved 74****Worse 5****No change 16**

Question	Wrong both times	Right Both times	Right before, wrong after	Wrong before, right after
Are headache, stomachache, tired muscles, sweating, and skin rashes signs of pesticide poisoning?	4	54	4	38
If exposed to pesticides, should you stop working and seek medical attention right away?	0	86	5	9
Can pesticides enter the body through the mouth, nose, eyes and skin?	2	82	5	11
Are shorts and a t-shirt the best clothing to wear when working in a field?	1	78	8	13
Is it O.K. to bring home empty pesticide containers and to reuse them?	0	88	6	6
Should you wash your hands before using the bathroom, eating, drinking or smoking at work?	0	85	5	10
Should you wash work clothing separately from the family's clothing?	0	82	5	13
Is pesticide residue dried pesticide left on the crops after an application?	11	51	7	31
Should you ask your boss for information about the nearest medical facility and recent applications?	1	81	8	10
Are there both short-term and long-term effects of pesticide exposure?	8	67	5	20
Is it O.K. to stay in the field if pesticides blow or drift into the field where you are working as long as you cover your face?	10	78	1	11
Is your boss responsible for getting you to the doctor if you get sick from pesticides while working?	3	84	4	9
Can pesticides make people sick in different ways, even if they are working in the same area?	1	81	6	12
Is irrigation water safe to drink?	4	83	1	12
Can the boss fire you for refusing to go into a field while it is being sprayed with pesticides?	8	61	9	22

Table 7**Worker Evaluation Scores by State**

STATE		Prescore	Postscore	Difference
Florida	Mean	8.13	12.75	4.19
	N	16	16	16
	Std.	2.47	.86	1.7
	Deviation			
New Jersey	Mean	11.30	12.43	1.21
	N	53	53	53
	Std.	2.04	2.42	2.59
	Deviation			
Washington	Mean	10.44	13.33	2.75
	N	27	27	16
	Std.	1.87	1.0	1.88
	Deviation			
Puerto Rico	Mean	10.55	12.45	1.91
	N	11	11	11
	Std.	1.29	1.9	2.2
	Deviation			

Table 8

Specific Suggestions for Improving the Program

- Spending more time on state-specific information, the 11 points of the WPS, logistics and evaluations during both the Master Trainer Orientation and the Trainer Training
- For the master trainer orientation: spend more time teaching and allowing participant to learn the curriculum and manual.
- Specifically, the “Training Issues” section of the manual needs greater review and training.
- Consider putting each chapter title page on a large sheet of paper taped on the wall.
- More time to review reiterations of training points and training time budgeting tips.
- Combine the “How to Conduct Training for Field Workers” and “WPS” sections.
- Discuss use of and need for props by Master Trainers and Trainers Examples of props:
 - Central Notification Board
 - Soda bottles
 - Personal Protective Equipment (PPE)
 - Crop sheets
 - Large plastic bugs
- Consider separating trainings of employers from employees and regulators
- Secure meeting space with appropriate audio-visual capacity.
- Put into curriculum the expectations for workers to stay aware of pesticide risks.
- Discuss logistics and timing for worker trainers with Trainers- brainstorm ideas for folding chairs, training time etc.
- Develop a self-evaluation process for the workers and trainers to make the process iterative and be sure that the worker is gaining the necessary knowledge.
- Public health large scale education programs about specific symptoms of pesticide poisoning, acute and chronic exposures, drift exposure prevention, pesticide residue and that the boss cannot fire them for refusing to go into a field while it is being sprayed with pesticides.

Appendix 1

Goals

Master Trainer Orientation

Updated 3/26/03

During the April 3 and 4 Master Trainer Orientation, the participants will:

- Become fully acquainted with the Pilot Train-the-Trainer program
- Understand how the three state Pilot Train-the-Trainer programs will work
- Discuss and share training methods and ideas with other Master Trainers
- Fully understand the current Worker Protection Standard field worker training requirements
- Become familiar with the Pilot Train-the-Trainer manual contents
- Learn how to use the Pilot Train-the-Trainer manual
- Understand how to conduct the state Pilot Train-the-Trainer program
- Review and learn several types of training methods
- Gain practical experience in presenting aspects of the Worker Protection Standard fieldworker training

Appendix 2

Master Trainer Orientation/Training Marriott Crystal Gateway April 3-4, 2003

Thursday, April 3

- 12:30 Welcome and ice breaker exercise – Kevin Keaney, Pat
- 12:45 Overview of the WPS Assessment - Mike Walsh
- 1:15 What will happen during this orientation and training; overview and discussion:
importance of interactive training - Pat and Jenny
- 1:30 What will be happening during the state pilot train-the-trainer workshops;
discussion – Nancy Santiago, Karen Lewis, Eric Sespico
- 2:00 Review and discussion of the WPS requirements for training fieldworkers - Pat
- 2:30 Break
- 2:45 Overview of the instructor manual - Jenny
Review of instructor training objectives and training outline
- 3:45 Interactive training activity - Sharing Favorite Training Examples
Demonstration - Pat
Demonstration - Jenny
Group breakout and presentation of training examples - everyone
- 4:30 Discussion items - everyone (as time allows)
- Distinguishing between handlers and fieldworkers
 - Focusing on the objectives of the train-the-trainer program
 - Concepts of effective training
 - Overcoming language and cultural obstacles
 - Optimum training environments
 - Focusing on the objectives of the train-the-trainer program
 - Avoiding advocacy roles
 - Dealing with difficult people
 - Recognizing hierarchies within the group you are training

- Other

5:00 State groups get together

6:30 Dinner (meet in hotel lobby)

Friday, April 4

8:00 Review and updating items for discussion - Pat

8:15 Training methods - pointers and techniques. Using videos in training - Pat and Jenny (observers: Eric Sespico, Karen Lewis, and Nancy Santiago)

9:30 Break

9:45 Small groups meet and plan presentations based on various teaching methods – everyone (judges: Dick Herett, Mike Walsh, Michelle Devaux, Jerry Oglesby)

10:00 Small group teaching practice - everyone

11:15 Final discussion items from previous day - everyone

11:30 Overview of evaluation forms and evaluation process - Pat

11:45 Wrap up - Pat, Jenny, Mike, Kevin

12:00 Adjourn

Appendix 3

Observer Tool

Day 1 Trainer Training

Goal: To evaluate Master Trainers and Trainers across states in a way that validates and supplements other evaluation tools.

Goals for Master Trainers

“This program focuses on the 11 points of the Worker Protection Standard for field worker training. All aspects of the training should involve INTERACTIVE training methods.”

- Fully understand the current Worker Protection Standard field worker training requirements
- Become familiar with the Pilot Train-the-Trainer manual contents
- Learn how to use the Pilot Train-the-Trainer manual
- Understand how to conduct the state Pilot Train-the-Trainer program
- Review and learn several types of training methods

Gain practical experience in presenting aspects of the Worker Protection Standard fieldworker training

Goals for Trainers

1. Understand federal and state Worker Protection Standard fieldworker training requirements
2. Become familiar with the Pilot Train-the-Trainer manual contents and how to use the manual
3. Learn how to conduct a fieldworker Worker Protection Standard training program
4. Learn and practice several types of effective training techniques
5. Gain practical experience in presenting aspects of the Worker Protection Standard field worker training
6. Learn how to lead discussions related to the Worker Protection Standard field worker training
7. Examine problems and issues related to extending Worker Protection Standard training to agricultural fieldworkers

Agenda

A. (10 minutes) Introduction and course objectives. What will be covered, what you want participants to come away with. (see Manual *Introduction*, page I)

Interactive?

What method was used by the Master Trainer to present the information: lecture, Role playing, Case study, Group discussion with pictures, Quiz game, question and answer, flip chart, video, other _____

What was the mood of the Master Trainers (e.g., Nervous? Active? Inattentive? Comfortable? Curt/Rude in answering questions? Drew out every participant during discussion?)

What was the mood of the Trainers (e.g., Confused? Asked questions? Active participation? Appeared bored? Looked distracted? Various participants appeared to react to the information various ways? Other?

Comment on the room. Were there distractions during this presentation?

A. (20 minutes) Ice-breaker exercise. Pair students, have them get acquainted, and then have the pairs introduce each other to the rest of the group. (read Manual Section 6, pages 133-150) Allow five to ten minutes for them to get acquainted. The introduction should include name, company, job, where the person is from, training experiences, training plans, family information, and other interesting information. Ask introducers to stand while making their introductions. This exercise helps to relax the participants and gives them an opportunity to speak in front of the group.

Interactive?

What method was used: lecture, Role playing, Case study, Group discussion with pictures, Quiz game, question and answer, flip chart, video, other _____

What was the mood of the Master Trainers

What was the mood of the Trainers

How long did it take to get acquainted? Was 5-10 minutes enough time?

Did they seem to be comfortable telling their name/company/job?

How did the introductions to the group go?

B. (45 minutes) The Worker Protection Standard. Present an overview of the Worker Protection Standard to be sure everyone understands the requirements. (follow the material in the Manual Section 2, pages 19-30)

- a. Review WPS requirements (follow Manual Section 3, pages 31-52)
- b. Any state-specific requirements (you must conduct your own research for this information)

Were the MT able to present State-specific requirements- please keep a copy of the extra handouts or all materials that were given out. Please record the state specific requirements that were presented.

Interactive?

What method was used: lecture, Role playing, Case study, Group discussion with pictures, Quiz game, question and answer, flip chart, video, other _____

What was the mood of the Master Trainers

What was the mood of the Trainers

C. (15 minutes) Break

What happened during the break?

D. (90 minutes) Training Materials and Methods. This segment will familiarize participants with the training materials available for training field workers, and with effective training techniques.

- a. Review Pesticide Safety for Agricultural Workers. Point out the different sections of the book.
- b. Describe other training materials
 - i. Flip chart and Protect Yourself from Pesticides booklet
 - ii. Videos
 - iii. Other written materials (see Manual Bibliography, pages 161-162, for additional ideas)
- c. Briefly demonstrate some of the training materials or describe how they can be used. Contrast passive and interactive training techniques (see Manual Section 5, pages 67-76)

Get feedback from participants on their experience with and usefulness of the different types of techniques.

- i. Role playing (read pages 103-106)
- ii. Case study (read pages 90-96)
- iii. Group discussion with pictures (read pages 82-89)
- iv. Quiz game - question and answer (read pages 116-132)

Interactive?

What methods were used: lecture, Role playing, Case study, Group discussion with pictures, Quiz game, question and answer, flip chart, video, other _____

Were all different types of interactive methodologies covered?

What was the mood of the Master Trainers

What was the mood of the Trainers

- E.** (30 minutes) Conducting WPS Training for Field Workers. Discuss what a typical training session will include: covering 11 points for fieldworker training; keeping training sessions interactive; budgeting time for the training sessions.

Interactive?

What methods were used: lecture, Role playing, Case study, Group discussion with pictures, Quiz game, question and answer, flip chart, video, other _____

What was the mood of the Master Trainers

What was the mood of the Trainers

- F.** (60 minutes) Lunch

- G.** (120 minutes) Practice Training. Have participants break into groups of 3 to 5 (smaller is better) and assign each group one of the following training materials or training techniques. Ask them to prepare and make a presentation using their assigned material or technique. Each member of the group should have an equal role in the presentation.

- a. Assign the materials by having each group pick from cards with the various techniques and materials written on the flip side. Choices will include:
 - i. WPS flip chart (see manual pages 97-100)
 - ii. Case study (see manual pages 90-96)
 - iii. Role play (see manual pages 101-106)
 - iv. Video (see manual pages 107-112)
 - v. Group discussion with pictures (see manual pages 82-89)
- b. Give the groups 15 to 20 minutes to prepare their presentations—incorporate this with a break if needed. For some techniques, props, such as protective eyewear, gloves, empty soda can, etc. will be useful.
- c. Have each group conduct their interactive presentations
- d. At the end of each presentation, ask participants to evaluate the presentation* according to:

- e. correctness of information
 - i. clarity of information
 - ii. ability to engage group interest and participation

*Keep the discussions positive, constructive, and helpful to the presenters!

Interactive?

What method was used: lecture, Role playing, Case study, Group discussion with pictures, Quiz game, question and answer, flip chart, video, other _____

What was the mood of the Master Trainers

What was the mood of the Trainers

Were the critiques offered by the trainers of each other positive, constructive and helpful to the presenters?

(15 minutes) Break

What happened during the break?

H. (45 minutes) Teaching Issues (prepare for this by reading the Manual pages 78-81). As a wrap-up activity, ask for volunteers (or appoint individuals) to lead the group on brief discussions of the following topics:

- a. How can you overcome educational and literacy barriers when conducting WPS training?

Interactive?

What method was used: lecture, Role playing, Case study, Group discussion with pictures, Quiz game, question and answer, flip chart, video, other _____

What was the mood of the Master Trainers

What was the mood of the Trainer

What method was chosen by the trainers to present this information to the group (was it interactive)?

How did the discussion go?

- b. Very often there are time limitations when providing training. Should you sacrifice either training content or effective training methods when faced with these constraints?

What method was chosen by the trainers to present this information to the group (was it interactive)?

How did the discussion go?

- c. How would you handle a training situation where there are many distractions or other uncomfortable conditions?

What method was chosen by the trainers to present this information to the group (was it interactive)?

How did the discussion go?

Describe methods or ways you would use to overcome poor or non-receptive attitudes from workers who may be tired or who may resent participating in the training because of missing work opportunities or

because they want to be elsewhere?

What method was chosen by the trainers to present this information to the group (was it interactive)?

How did the discussion go?

- d. How would you deal with an employer who may be distrustful of the training you are providing or who is impatient with the time being spent on the training?

What method was chosen by the trainers to present this information to the group (was it interactive)?

How did the discussion go?

How do you plan to use the materials and techniques that have been covered in this training session?

What method was chosen by the trainers to present this information to the group (was it interactive)?

How did the discussion go?

Finish off by using a Personal Experience activity based on the information on pages 113-115 in the Manual. You should present the background information and then have one or more of the participants cite a personal experience that the group will discuss.

How did the discussion go? Were people willing to share personal experiences?

[[NOTE: If this is back to something the MT would present, I think we need to go back to the regular series of questions about method used to present and mood of MT and mood of trainers.]]

(30 minutes) Conclusions and Expectations. Answer final questions. Restate expectations for training workers (cover 11 points and keep training interactive). Introduce evaluation tools.

Interactive?

What method was used: lecture, Role playing, Case study, Group discussion with pictures, Quiz game, question and answer, flip chart, video, other _____

What was the mood of the Master Trainers

What was the mood of the Trainers

How did the Master Trainers answer questions?

How did the discussion go?

How did the trainers respond to the evaluation tools?

How did the trainers respond to the evaluation tools?

What questions did trainers ask? Were any about issues not covered in the curriculum manual? Was there anything special about any of the participants; e.g., disruptive, an individual tried to monopolize discussion, some individuals were very hesitant to speak up, other. Was the MT able to deal with the needs of these participants?

What are your overall impressions of the success of this training? Do you feel participants left well-prepared to train workers?

Considering what you saw, does anything come to mind that could have improved the training of trainers?

Second Day Assignments

Before the second day participants leave today's session, get them together and give them assignments to

prepare presentations before the session begins tomorrow. Assign each participant to prepare a 10 minute presentation that covers 3 of the 11 WPS topics. (Assign each participant to prepare a 10 minute presentation that covers 3 of the 11 WPS topics and that uses 2 of the training methods presented today. Prepare for this by writing the 11 topics on slips of paper and put these into a container. Write the training methods on slips of paper and put these in another container. Have a participant draw three training topics and two training methods and record their selections. Put the slips of paper back into the containers and have the next person draw their assignments.)

How did the gathering of second day participants go?

How did the instructions for the assignments and preparation for presentations go?

Did those who agreed to a second day of training appear to be still interested in participating?

Appendix 4

Master Trainer Tool One

Master Trainer Pre Orientation and Training

Name: _____

Age _____

Sex _____

What grade did you complete in school? _____

What language you speak most of the time? _____

As you know, this Program is a pilot project to try to help trainers do a better job educating farmworkers under the Worker Protection Standard. We would like to evaluate the effectiveness of this Train-the-Trainer Program with your help and your suggestions for improvement. We will be asking you questions at several points during the program, and we also invite you to talk directly to an evaluator² to offer further information.

Please answer the following questions concerning your current experience in training others and, in particular, training individuals around the WPS.

Your Experience As A Master Trainer

Please describe any previous experience you have teaching other trainers how to better educate individuals. This would be on any subject not just the WPS.

In your role as a Master Trainer, do you have a manual, book or other material you use to guide your training of trainers? If so, please describe it.

How many Train-the-Trainer sessions have you conducted where you trained others how to teach individuals about a subject?

Your Activities As A Master Trainer For WPS

How many of these Train-the-Trainer sessions concerned the WPS?

How many people have attended the WPS train-the-trainer sessions you have taught?

Please briefly describe how you generally conduct WPS Train-the-Trainer sessions.

What tools, printed materials, videos, audio-visuals and teaching aids do you use?

How long does the training last?

What method(s) do you use to teach (For example do you use a lecture format, questions and answers, discussion groups, demonstrations, role playing or other method?) Approximately, how long do you spend in each activity?

WPS Training You Have Offered

² Evaluator: Patricia Boiko, MD, MPH is an independent evaluator of the pilot program. 206 406 7012, email: peb5@u.washington.edu. She works the Pacific Northwest Agricultural Safety and Health Center at the University of Washington.

How many pesticide handlers have you personally trained under the WPS?

How many farmworkers have you personally trained under the WPS?

If you conduct WPS training directly for farmworkers please answer the questions below.

If you do NOT conduct WPS training directly for farmworkers please skip this question.

What tools, printed materials, videos, audio-visuals or other teaching aids do you use?

How long does the training usually last?

What method(s) do you use to teach (For example do you use a lecture format, questions and answers, discussion groups, demonstrations, role playing or other method)? Approximately, how long do you spend in each activity?

Based on a self - assessment, please indicate your competency and effectiveness as a WPS train the trainer professional.

high level of competency and effectiveness

moderate level of competency and effectiveness

low level of competency and effectiveness

This information is for evaluation purposes only. Information will be handled in a confidential manner.

THANK YOU VERY MUCH FOR YOUR HELP

Appendix 5

Master Trainer Tool Two

Master Trainer - Post Orientation

This is a continuation of the evaluation of the Pilot WPS Train-the-Trainer Program. Please help us by answering the following questions concerning your understanding of this Program and suggestions for its improvement. We will be asking you questions again after you conduct a training and we also invite to talk directly to an evaluator³ to offer further information.

1. What other topics do you wish were covered in this Master Trainer Orientation?
2. Do you have any questions concerning these goals or the scope of the Program?
3. Do you think there are other goals and scope for the Program that should be included
4. In your opinion what are the key goals and scope of this pilot WPS Train the Trainer Program?

Please answer the questions below using a 1 - 5 ranking scale where each number represents the following:

1= strongly disagree

2= disagree

3= no strong opinion

4= agree

5= strongly agree

5. I feel better prepared to train trainers as a result of attending this Master Trainer Orientation.

Strongly agree	Agree	No opinion	Disagree	Strongly disagree
5	4	3	2	1

- a. If you agreed above, how has this Master Trainer Orientation better prepared you to train others?

6. I fully understand the current Worker Protection Standard field worker training requirements.

Strongly agree	Agree	No opinion	Disagree	Strongly disagree

³ Evaluator: Patricia Boiko, MD, MPH is an independent evaluator of the pilot program. 206 406 7012, email: peb5@u.washington.edu. She works the Pacific Northwest Agricultural Safety and Health Center at the University of Washington.

5 4 3 2 1

Comments:

7. I was able to share my ideas and experiences with other trainers.

Strongly agree	Agree	No opinion	Disagree	Strongly disagree
5	4	3	2	1

Comments:

8. I got good ideas and learned from the other Master Trainers.

Strongly agree	Agree	No opinion	Disagree	Strongly disagree
5	4	3	2	1

Comments:

9. I have learned how to use the Pilot Train-the-Trainer manual.

Strongly agree	Agree	No opinion	Disagree	Strongly disagree
5	4	3	2	1

Comments:

10. The training location was comfortable and conducive to learning.

Strongly agree	Agree	No opinion	Disagree	Strongly disagree
5	4	3	2	1

Comments:

11. The manual and handouts are logically organized.

Strongly agree	Agree	No opinion	Disagree	Strongly disagree
5	4	3	2	1

Comments:

12. I feel that the Master Trainer Orientation covered all necessary topics.

Strongly agree	Agree	No opinion	Disagree	Strongly disagree
5	4	3	2	1

Comments:

13. Enough time was spent on each topic during this Master Training Orientation.

If you disagreed which topics do you wish more time was spent covering?

Strongly agree	Agree	No opinion	Disagree	Strongly disagree
5	4	3	2	1

Comments:

14. The orientation content was relevant to training WPS trainers.

Strongly agree	Agree	No opinion	Disagree	Strongly disagree
5	4	3	2	1

Comments:

15. The Train-the-Trainer orientation introduced new or unfamiliar information or techniques to me.

Strongly agree	Agree	No opinion	Disagree	Strongly disagree
5	4	3	2	1

Comments:

16. I will use most of what I learned in this training.

Strongly agree	Agree	No opinion	Disagree	Strongly disagree
-----------------------	--------------	-------------------	-----------------	--------------------------

5

4

3

2

1

Comments:

17. I feel confident I now know what is expected of me when I train trainers as part of this pilot Program.

Strongly agree	Agree	No opinion	Disagree	Strongly disagree
-----------------------	--------------	-------------------	-----------------	--------------------------

5

4

3

2

1

Comments:

This information is for evaluation purposes only. Information will be handled in a confidential manner.

THANK YOU VERY MUCH FOR YOUR HELP

Appendix 6

Master Trainer Tool Three

Master Trainers – Post Training Of Trainers

Name _____

Now that you have trained trainers using the tools and methods developed for this Program, please help us with our Program evaluation one last time by answering the following questions. We also invite you to talk directly to an evaluator⁴ to offer further information.

The training you just conducted

1. How successful do you feel the training you just conducted was in creating effective WPS trainers?

Very Successful	Somewhat Successful	No Opinion	Not Very Successful	Not Successful At All
----------------------------	--------------------------------	-------------------	--------------------------------	----------------------------------

5

4

3

2

1

Comments:

2. Would you change any of the topics that were covered?

___No ___Yes

Comments:

3. Would you change the order of the training agenda?

___No ___Yes

Comments:

4. Would you change the length of the Train-the-Trainer program (either shorten or lengthen it)?

___No ___Yes

If yes, would you shorten or lengthen it, and why? How would you lengthen it?

5. Are there any changes you would make to the training manual?

___No ___Yes

Comments:

⁴ Evaluator: Patricia Boiko, MD, MPH is an independent evaluator of the pilot program. 206 406 7012, email: peb5@u.washington.edu. She works the Pacific Northwest Agricultural Safety and Health Center at the University of Washington.

a. Did you supplement the manual with additional handouts?

☐ No ☐ Yes

6. Did you use any state specific WPS information during your in-state training?

☐ No ☐ Yes

Comments:

7. Do you think adding the second day for trainers to practice training:

a. Helped you provide more effective training?

☐ No ☐ Yes

Comments:

b. Is worth the extra time for both the trainers and the master trainers?

☐ No ☐ Yes

Comments:

8. With regard to the second day of training, would you:

a. change the methods used to provide additional hands-on training?

☐ No ☐ Yes

Comments:

b. change the information covered?

☐ No ☐ Yes

Comments:

c. lengthen or shorten the amount of time spent on additional training?

☐ No ☐ Yes

Comments:

d. make any other changes to the structure or content of the additional day of training?

☐ No ☐ Yes

Comments:

9. Is one day enough or should a second day be automatically included (not optional)

☐ No ☐ Yes

Comments:

10. Did you face any unexpected challenges during your training session?

☐ No ☐ Yes

Comments:

11. Do you think trainers who have not attended this training could provide similarly effective training?

☐ No ☐ Yes

Comments:

12. Did the in-state training location meet your training needs?

☐ No ☐ Yes

Comments:

Master Trainer Orientation

Now that you have used the information given to you during the Master Trainer Orientation, please help us by thinking back to that session to evaluate its effectiveness in preparing you to train trainers.

13. The Master Trainer Orientation adequately prepared me to train trainers for this WPS Pilot Program.

Strongly disagree	disagree	no opinion	agree	Strongly agree
1	2	3	4	5

If you agree, in what way were you better prepared?

If you agree or disagree, what other things could have been done to help better prepare you?

Comments:

14. Without attending the Master Trainer Orientation, I could not have taught trainers as effectively.

Strongly disagree	Disagree	no opinion	agree	strongly agree
1	2	3	4	5

Comments:

15. Were the methods you were taught at the Master Trainer Orientation successful during your Train-the-Trainer Session?

Very Successful	Somewhat Successful	No Opinion	Not Very Successful	Not Success-ful At All
1	2	3	4	5

Comments:

16. Were the methods used to teach you during the Master Trainer Orientation successful in preparing you to conduct this Pilot Train-the-Trainer Program?

Very Successful	Somewhat Successful	No Opinion	Not Very Successful	Not Success-ful At All
1	2	3	4	5

Comments:

17. Would you make any changes to the content or topics covered during the Master Trainer Orientation?

___No ___Yes

If yes, please explain:

18. Was the time spent during the Master Trainer Orientation enough (not rushed or drawn out) to prepare you to conduct this Train-the-Trainer Pilot Program? ___No ___Yes

Comments:

19. Please circle what you believe is your competency and effectiveness as a WPS train the trainer professional.

- high level of competency and effectiveness
- moderate level of competency and effectiveness
- low level of competency and effectiveness

THANK YOU VERY MUCH FOR YOUR HELP

Appendix 7

Trainer Questions Regarding Master Trainer Training

Scale

Strongly disagree	Disagree	No opinion	Agree	Strongly agree
1	2	3	4	5

1. The training location was comfortable and conducive to learning.
2. The instructor created an environment that promoted constructive and interactive discussions.
3. The training material contained new or unfamiliar information.

Was there any new information in this training session? If so, what?

4. The instructor created an environment that promoted constructive and interactive discussions.
5. The information was conveyed in an understandable manner by the trainer.
 - a. In your opinion, what did the instructor do well?
 - b. How can the curriculum be improved? Additional training techniques, etc
 - c. What would you prefer that the instructor do differently?

Appendix 8

Trainer Pre and Post Knowledge Evaluation

Please respond to the following by circling either true, false, or I'm not sure.

8. I understand the federal pesticide safety regulations.

True False I'm not sure

9. I know effective ways to communicate WPS information.

True False I'm not sure

10. I know a variety of training techniques that I can adapt to my own program.

True False I'm not sure

11. Providing pesticide safety training to workers is a legal requirement.

True False I'm not sure

12. A pesticide that has a label that says "Warning" is less toxic than one that says "Danger."

True False I'm not sure

13. Symptoms that are observed soon after exposure are known as *acute onset*.

True False I'm not sure

14. It makes no difference how soon first-aid is given after pesticide contamination.

True False I'm not sure

15. Persistent symptoms are considered to be *chronic effects*, typically resulting from many exposures to the pesticide.

True False I'm not sure

16. The severity of symptoms of pesticide poisoning is usually determined by the amount of pesticide entering the person's tissues.

True False I'm not sure

17. High levels of exposure to pesticides can result in blurred vision, heavy sweating, vomiting, and blistered skin.

True False I'm not sure

18. A worker's risk equals the duration of exposure multiplied by the level of toxicity of a given pesticide.

True False I'm not sure

19. Anyone can tell the toxicity, safety gear needed, and first aid information of any given pesticide by simply looking at the label.

True False I'm not sure

20. Ingredients added to pesticides, such as solvents and stabilizers, may be toxic to people.

True False I'm not sure

21. Once pesticide has been applied to a field, the workers may return immediately.

True False I'm not sure

22. FIFRA's provisions include requiring the users of restricted-use pesticides to be certified and establishing tolerances for residues that may remain on raw agricultural products.

True False I'm not sure

23. Pesticide residue is a powder that can be found on plants, in soil, in water and may be transferred onto clothing.

True False I'm not sure

24. Children, pregnant women, and the elderly, do not face a higher risk if exposed to pesticides.

True False I'm not sure

25. WPS covers workers who are employed in the production of agricultural plants on farms, in forests, and in commercial nurseries and greenhouses.

True False I'm not sure

26. The WPS requires: notifying workers when pesticides are to be applied, establishing restricted-entry intervals, and providing protective equipment to the workers.

True False I'm not sure

27. Pesticide notification requirements can be found on the pesticide label.

True False I'm not sure

28. All WPS-covered pesticides have a restricted-entry interval (REI).

True False I'm not sure

29. Employers must provide decontamination supplies that must be located within one-quarter mile of the work location.

True False I'm not sure

30. Employers must provide emergency assistance to the worker if he or she is injured or made ill by pesticides while working.

True False I'm not sure

31. Employers must display safety posters that contain pesticide safety information and contact information for the nearest medical facility.

True False I'm not sure

32. Employers do not have to provide transportation for any injured worker to the nearest medical facility.

True False I'm not sure

33. Employers may not take action against any worker attempting to comply with WPS regulations.

True False I'm not sure

34. It is helpful ?required in your training for you to know about state and local , pesticide regulations.

True False I'm not sure

35. Knowing the cycles of crops and harvest times will help you understand when the greatest number of agricultural workers are employed and require training. True False I'm not sure

Appendix 9

Worker Tool 1

Pre-Training Script

Today, we would like you to help us evaluate our program. This program is to help trainers teach farmworkers about pesticides and the Worker Protection Standard. The Environmental Protection Agency wants to help trainers do a better job with your suggestions for improvement. Responses are anonymous and won't be shared with your boss or affect your employment.

This is NOT to test you but to test how well the program works. We will be asking you some of the same questions before and after the training program. As you listen to this cassette tape, please mark a yes, no or I don't know response next to the number of each of the questions. The yes answer is blue, the no is brown and the I don't know is a black question mark.

Please let the trainer know if you have any problems filling out the form or any questions. Hold on to the form for collection after the training. Thank you.

Number one.

Have you had any previous pesticide health and safety training?

Yes, No or I'm not sure

Number two

Did you see a video for pesticide training?

Yes, No or I'm not sure

Number three

Have you received instruction from your supervisor or employer concerning which fields were recently sprayed?

Yes, No or I'm not sure

Number four

Do you think it is worth your time to go through this WPS pesticide safety class?

Yes, No or I'm not sure

Number five

Did you attend a class where someone talked to you about pesticide health and safety?

Yes, No or I'm not sure

Number six

Would you say you know very little about pesticide health and safety?

Yes, No or I'm not sure

Number seven

Would you say that you know something about pesticide health and safety?

Yes, No or I'm not sure

Number eight.

Would you say that you know a lot about pesticide health and safety?

Yes, No or I'm not sure

Number nine.

Are headache, stomachache, tired muscles, sweating, and skin rashes signs of pesticide poisoning?

Yes, No or I'm not sure

Number ten.

If exposed to pesticides, should you stop working and seek medical attention right away?

Yes, No or I'm not sure

Number eleven.

Can pesticides enter the body through the mouth, nose, eyes and skin?

Yes, No or I'm not sure

Number twelve.

Are shorts and a t-shirt the best clothing to wear when working in a field?

Yes, No or I'm not sure

Number thirteen.

Is it O.K. to bring home empty pesticide containers and to reuse them?

Yes, No or I'm not sure

Number fourteen.

Should you wash your hands before using the bathroom, eating, drinking or smoking at work?

Yes, No or I'm not sure

Number fifteen.

Should you wash work clothing separately from the family's clothing?

Yes, No or I'm not sure

Number sixteen.

Is pesticide residue dried pesticide left on the crops after an application?

Yes, No or I'm not sure

Number seventeen.

Should you ask your boss for information about the nearest medical facility and recent applications?

Yes, No or I'm not sure

Number eighteen.

Are there both short-term and long-term effects of pesticide exposure?

Yes, No or I'm not sure

Number nineteen.

Is it O.K. to stay in the field if pesticides blow or drift into the field where you are working as long as you cover your face?

Yes or No or I'm not sure

Number twenty.

Is your boss responsible for getting you to the doctor if you get sick from pesticides while working?

Yes or No or not sure

Number twenty-one.

Can pesticides make people sick in different ways, even if they are working in the same area?

Yes or No or Not sure

Number twenty-two.

Is irrigation water safe to drink?

Yes or No or Not sure

Number twenty-three.

Can the boss fire you for refusing to go into a field while it is being sprayed with pesticides?

Yes or No or I'm not sure

You are finished with the first evaluation. After the training you will turn back on the tape and do a second evaluation. Please turn off the tape player NOW.

Appendix 10

Worker Tool 2

Post-training

Now that you have completed the training, we would like you to help us evaluate our program. You should have already completed an evaluation before you do this one. If you have NOT done an evaluation already, please turn off the tape and tell your trainer.

This is NOT to test you but to test how well the program works. Responses won't be shared with your boss or affect your employment. Many of these question were asked before you began the training. As you listen to this cassette tape, please mark a yes, no or I don't know response next to the number of each of the questions. The yes answer is blue, the no is brown and the I don't know is a black question mark.

Please let the trainer know if you have any problems filling out the form or any questions. Hold on to the form for collection after the training. Thank you.

Number one.

Was the training location comfortable?

Yes or No or I'm not sure

Number two.

Was the training time convenient for you?

Yes or No or I'm not sure

Number three.

Did you feel that enough time was spent on each topic during this training?

Yes or No or I'm not sure

Number four.

Was the training information important for pesticide safety?

Yes or No or I'm not sure

Number five.

Will you use most of what you learned in this training?

Yes or No or I'm not sure

Number six.

Do you feel like you know what is expected of you in order to stay aware of pesticide risks?

Yes or No or I'm not sure

Number seven.

Are headache, stomachache, tired muscles, sweating, and skin rashes signs of pesticide poisoning?

Yes or No or I'm not sure

Number eight.

If exposed to pesticides, should you stop working and seek medical attention right away?

Yes or No or I'm not sure

Number nine.

Can pesticides enter the body through the mouth, nose, eyes and skin?

Yes or No or I'm not sure

Number ten.

Are shorts and a t-shirt the best clothing to wear when working in a field?

Yes or No or I'm not sure

Number eleven.

Is it O.K. to bring home empty pesticide containers and to reuse them?

Yes or No or I'm not sure

Number twelve.

Should you wash your hands before using the bathroom, eating, drinking or smoking at work?

Yes or No or I'm not sure

Number thirteen.

Should you wash work clothing separately from the family's clothing?

Yes or No or I'm not sure

Number fourteen.

Is pesticide residue dried pesticide left on the crops after an application?

Yes or No or I'm not sure

Number fifteen.

Can pesticide and pesticide residue be found on leaves, stems, in the air, and on produce?

Yes or No or I'm not sure

Number sixteen.

Do people who have been exposed to certain fumigant gases have fevers and sometimes behave strangely?

Yes or No or I'm not sure

Number seventeen.

Should you ask your boss for information about the nearest medical facility and recent applications?

Yes or No or I'm not sure

Number eighteen.

Are there both short-term and long-term effects of pesticide exposure?

Yes or No or I'm not sure

Number nineteen.

Is it O.K. to stay in the field if pesticides blow or drift into the field where you are working as long as you cover your face?

Yes or No or I'm not sure

Number twenty.

Is it O.K. to stay in your house if it is near a field that has just been sprayed with pesticides?

Yes or No or I'm not sure

Number twenty-one.

Is your boss responsible for getting you to the doctor if you get sick from pesticides while working?

Yes or No or I'm not sure

Number twenty-two.

Can pesticides make people sick in different ways, even if they are working in the same area?

Yes or No or I'm not sure

Number twenty-three.

Is irrigation water safe to drink?

Yes or No or I'm not sure

Number twenty-four

Can the boss fire you for complying with the training you just received?

Yes or No or I'm not sure

Number twenty-five

If you get pesticides on your skin, should you keep working and shower when you get home?

Yes or No or I'm not sure

Number twenty-six

The 11 points of the WPS are:

1. Where and in what form pesticides may be encountered during work activities.
2. Hazards of pesticides resulting from toxicity and exposure, including acute effects, chronic effects, delayed effects, and sensitization.
3. Routes through which pesticides can enter the body.
4. Signs and symptoms of common types of pesticide poisoning.
5. Emergency first aid for pesticide injuries or poisonings.
6. How to obtain emergency medical care.
7. Routine and emergency decontamination procedures, including emergency eye flushing techniques.
8. Hazards from chemigation and drift.
9. Hazards from pesticide residue on clothing.
10. Warnings about taking pesticides or pesticide containers home.

11. An explanation of the WPS requirements designed to protect workers, including application and entry restrictions, design of the warning sign, posting of warning signs, oral warnings, availability of specific information about applications, and protection against retaliatory acts.

Did you feel that the training covered all 11 points of the WPS?

Yes or No or I'm not sure

Number twenty-seven

Did you think it is worth your time to go through this WPS pesticide safety class?

Yes or No or I'm not sure

Number twenty-eight

Did you learn new information from the training?

Yes or No or I'm not sure

Number twenty-nine

Did you like the way the trainers taught this time compared to the way you were taught before?

Yes or No or I'm not sure

Number thirty

Did you learn more this time than you have from past trainings?

Yes or No or I'm not sure

Number thirty-one

Did you have an opportunity to have all your questions concerning pesticide safety answered?

Yes or No or I'm not sure

Number thirty-two

Would you say that you know more about about pesticide health and safety now that you received this training?

Yes or No or I'm not sure

Please write in any Suggestions to improve the training and training methods that you found helpful previously on the bottom of the answer sheet.

THANK YOU. Please turn off the tape.